

## 03566000 HIWASSEE RIVER AT CHARLESTON, TN

LOCATION.--Lat 35°17'16", long 84°45'07", until April 9, 1996, lat 35°17'17", long 84°45'10", until Nov. 10, 1998, lat 35°17'42", long 84°45'36" thereafter, Hydrologic Unit 06020002, on left bank 250 ft upstream from Norfolk Southern Railway bridge until April 9, 1996, at Norfolk Southern Railway bridge until Nov. 10, 1998, on right bank at dolphin at Bowater Southern Paper Company's barge facility thereafter, 0.3 mi downstream from bridge on U.S. Highway 11 at Charleston, and at mile 18.2.

DRAINAGE AREA.--2,298 mi<sup>2</sup>.

PERIOD OF RECORD.--November 1898 to April 1899, November 1899 to April 1903, October 1919 to January 1940, January 1963 to January 1977, September 1979 to December 1981 (vane lost), August 1987 to current year. Gage-height records collected at this station during the period December 1884 to December 1889 are contained in the United States War Department Stages of Ohio River and Principal Tributaries, 1858-89, Part 1, and during period January 1890 to December 1943 in reports of the U.S. Weather Bureau.

REVISED RECORDS.--WSP 853: Drainage area. WSP 1436: 1902, 1922(M), 1928, 1936(M).

GAGE.--Data collection platform and acoustic velocity meter. Datum of gage is 665.56 ft above NGVD of 1929. Prior to July 18, 1925, non-recording gages, and July 18, 1925 to September 6, 1926, water-stage recorder, at present site, at datum 1.50 ft higher. September 1926 to January 1940, January 1963 to January 1977, September 1979 to December 1981, August 1987 to April 1996, on left bank 250 ft upstream of present site, at same datum.

REMARKS.--Records good except for estimated discharges, which are poor. Some diversions above gage for industrial and municipal water supplies. Flow regulated by seven reservoirs (see p. 358 and Water Resources Data for Georgia and North Carolina). Reverse flow has occurred for short periods each year since closure of Chickamauga Dam on Tennessee River in 1939.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Mar. 31, 1886, reached a stage of 34.0 ft, present datum, discharge about 70,000 ft<sup>3</sup>/s.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 34,200 ft<sup>3</sup>/s, Sept. 17; maximum gage height, 22.54 ft, Sept. 17; minimum daily, 1,090 ft<sup>3</sup>/s, May 27, minimum gage height, 10.67 ft, Mar. 28.

DISCHARGE, CUBIC FEET PER SECOND  
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3,360	4,490	3,920	4,420	2,780	2,430	2,300	1,510	2,480	4,190	3,400	3,210
2	4,040	4,130	4,290	4,100	2,440	2,640	2,000	1,770	2,150	4,360	2,440	2,620
3	3,850	4,300	4,620	4,190	3,100	3,720	1,600	1,910	2,320	4,610	2,790	2,940
4	5,070	4,420	5,240	3,870	4,570	3,380	1,580	1,880	2,160	3,600	3,210	2,530
5	4,070	4,180	5,540	5,150	3,580	3,000	1,690	1,720	2,330	3,550	3,900	3,270
6	4,150	4,960	5,480	8,450	8,590	8,570	1,440	1,710	2,210	3,740	3,270	4,870
7	5,830	4,390	5,660	6,510	13,000	8,110	1,340	1,980	1,940	3,210	2,720	6,350
8	5,150	5,480	4,630	6,410	9,490	6,270	1,350	1,540	1,850	3,270	2,360	6,310
9	5,060	4,520	4,300	5,530	7,770	6,390	1,400	1,780	1,950	2,960	2,740	3,470
10	5,010	5,050	4,240	4,640	6,070	6,060	1,240	1,520	1,520	3,260	2,970	4,060
11	4,460	4,760	6,470	4,410	5,520	4,610	1,240	1,770	1,680	2,660	4,750	3,790
12	4,030	3,930	6,830	4,540	5,550	4,090	1,390	1,580	2,080	2,860	3,880	3,590
13	4,960	4,040	5,290	4,240	5,360	3,320	1,780	1,750	1,750	2,910	3,980	4,660
14	4,820	4,080	4,540	3,800	4,240	2,370	2,540	1,430	1,690	2,640	3,710	5,040
15	5,070	4,030	4,560	4,290	3,760	3,050	2,110	1,550	1,560	3,320	2,970	5,320
16	4,570	3,310	4,400	4,870	5,710	3,530	1,730	1,420	1,520	3,150	2,250	7,060
17	4,380	2,470	6,060	3,880	5,460	4,150	1,250	1,620	1,210	2,880	4,050	27,300
18	3,690	2,940	6,030	3,960	4,870	4,350	1,280	1,280	2,170	2,290	3,710	23,500
19	3,310	6,000	5,870	4,690	4,390	3,770	1,540	1,760	2,230	2,340	4,250	13,300
20	3,600	7,440	5,480	4,010	3,980	1,720	1,640	1,460	2,260	2,200	4,500	11,100
21	3,440	5,930	4,590	3,860	3,710	2,130	1,570	1,400	2,080	2,800	3,110	10,100
22	4,090	4,170	4,210	3,200	3,790	2,720	1,630	1,320	1,690	2,380	3,740	8,550
23	4,310	3,780	3,980	3,250	2,970	3,180	1,520	1,270	1,620	2,410	3,060	7,800
24	4,300	4,020	4,360	3,230	3,190	2,720	1,420	1,140	1,670	2,190	4,280	8,030
25	4,940	5,610	5,600	3,050	3,140	1,690	1,160	1,270	3,470	2,010	5,170	7,490
26	3,950	4,970	4,140	6,860	3,640	1,870	1,590	1,100	8,090	2,140	4,410	7,470
27	4,350	4,130	3,920	6,040	3,200	1,690	1,940	1,090	4,740	2,500	4,600	7,340
28	4,190	4,820	4,260	5,500	3,360	1,620	1,670	1,260	2,650	3,220	3,320	7,570
29	3,530	6,010	3,770	4,640	2,830	1,500	1,670	1,470	2,500	2,500	2,300	7,290
30	4,000	4,190	5,020	3,550	---	1,670	1,580	3,070	2,550	2,470	2,500	5,540
31	4,380	---	5,350	4,070	---	2,050	---	2,810	---	2,680	4,530	---
TOTAL	133,960	136,550	152,650	143,210	140,060	108,370	48,190	50,140	70,120	91,300	108,870	221,470
MEAN	4,321	4,552	4,924	4,620	4,830	3,496	1,606	1,617	2,337	2,945	3,512	7,382
MAX	5,830	7,440	6,830	8,450	13,000	8,570	2,540	3,070	8,090	4,610	5,170	27,300
MIN	3,310	2,470	3,770	3,050	2,440	1,500	1,160	1,090	1,210	2,010	2,250	2,530

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1964 - 2004, BY WATER YEAR (WY)

	MEAN	3,934	4,303	5,323	5,928	6,290	5,883	4,268	3,972	3,852	3,857	3,900	3,782
MAX		9,332	8,638	12,980	13,060	16,270	13,860	11,950	14,650	8,897	7,586	6,201	7,382
(WY)		(1990)	(1968)	(1968)	(1974)	(1990)	(1990)	(1994)	(2003)	(1989)	(2003)	(1967)	(2004)
MIN		1,442	1,681	2,070	2,318	1,623	1,866	1,110	971	1,395	1,750	1,810	1,747
(WY)		(1989)	(1982)	(1988)	(2000)	(2000)	(1988)	(1988)	(1988)	(1988)	(1988)	(1988)	(1987)

## 03566000 HIWASSEE RIVER AT CHARLESTON, TN—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1964 - 2004	
ANNUAL TOTAL	2,273,630		1,404,890		4,622	
ANNUAL MEAN	6,229		3,838		6,891	
HIGHEST ANNUAL MEAN					1,940	
LOWEST ANNUAL MEAN					62,700	
HIGHEST DAILY MEAN	62,700	May 7	27,300	Sep 17	62,700	May 7, 2003
LOWEST DAILY MEAN	1,490	Apr 2	1,090	May 27	524	May 24, 1981
ANNUAL SEVEN-DAY MINIMUM	2,210	Apr 2	1,210	May 22	817	Oct 29, 1988
MAXIMUM PEAK FLOW			34,200	Sep 17	66,800	May 7, 2003
MAXIMUM PEAK STAGE			22.54	Sep 17	29.42	Mar 28, 1994
10 PERCENT EXCEEDS	8,960		6,030		7,530	
50 PERCENT EXCEEDS	5,290		3,660		4,020	
90 PERCENT EXCEEDS	3,310		1,580		2,050	

